

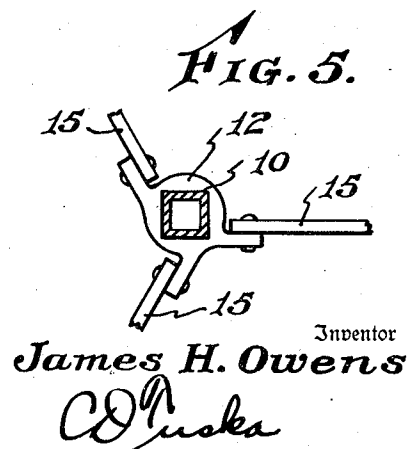
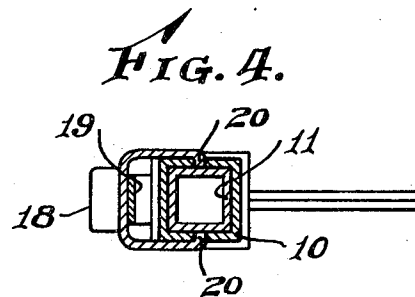
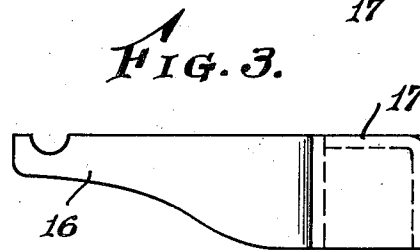
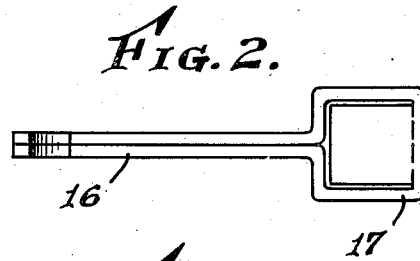
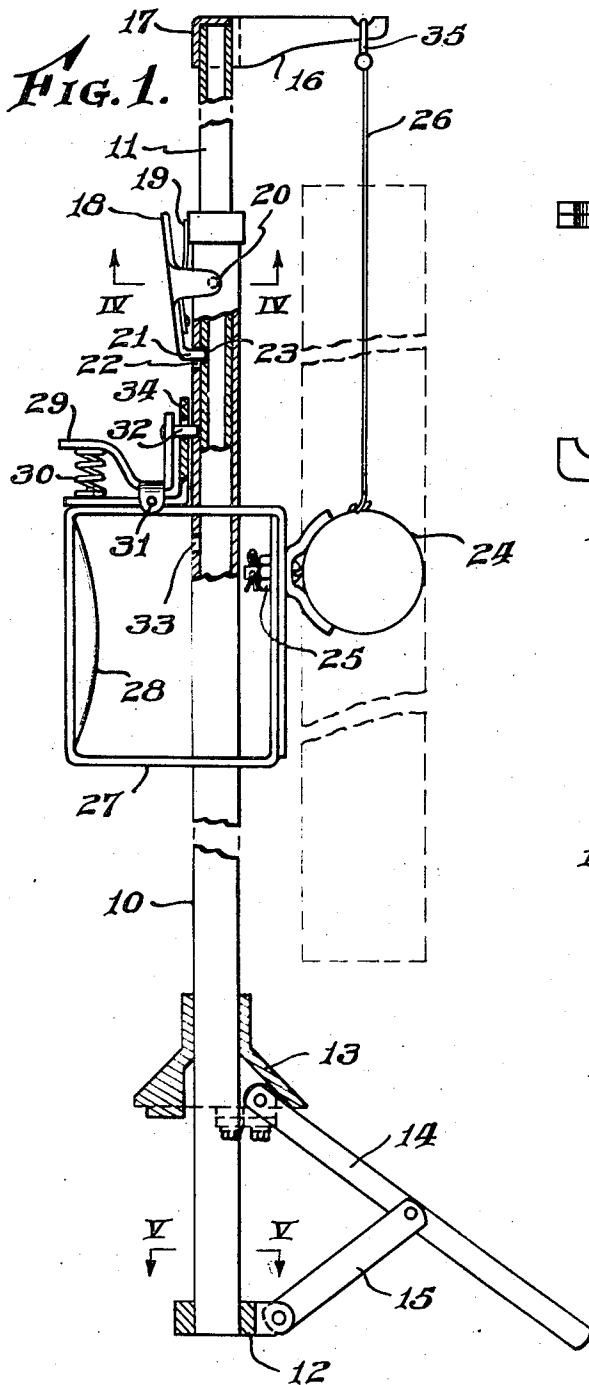
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STAND FOR MOTION PICTURE SCREENS

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STAND FOR MOTION PICTURE SCREENS

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1 Claim. (Cl. 160—24)

This invention relates to an improved stand for supporting motion picture screens and more particularly to a collapsible and portable stand of the general type often used for supporting the screens for 16 mm. portable motion pictures.

The construction involves a number of novel features including an improved tripod believed not heretofore used on such stands and improved fastening means for adjustably securing the several parts of the stand in proper relation to each other.

The improved construction further involves the use of a securing means in which the load will be applied as shear to relatively short rigid members without imposing any material strain on the latching means themselves.

One object of the invention is to provide an improved stand for motion picture screens.

Another object of the invention is to provide a stand for motion picture screens which has a relatively rigid collapsible base.

Another object of the invention is to provide a support for motion picture screens which is relatively rigid when extended and which is easily collapsed.

Another object of the invention is to provide a support for motion picture screens which is positively secured in position when opened so that there is no possibility of its collapsing during use.

Other and incidental objects of the invention will be apparent to those skilled in the art from a reading of the following specification and an inspection of the accompanying drawing, in which:

Figure 1 is a side view partly in section of my improved projection screen stand.

Figure 2 is a top view of the goose neck at the top of the stand which supports the upper edge of the screen;

Figure 3 is a side view of the side goose neck taken from the bottom of Fig. 2;

Figure 4 is a transverse section through the stand taken along the line IV—IV; and

Figure 5 is a view partly in section taken from the line V—V.

The stand includes the usual main tube 10 which I prefer to make in the form of a rectangular tube to prevent rotational strain upon the fastenings. The tube 10 is supported upon a tripod base including the spider 12 which is secured to the bottom of the tube, the slider 13 which is movable longitudinally on the tube, the legs 14 and the braces 15. This portion of the device is constructed in accordance with Biber-

man Patent No. 2,303,978, with the length of the portion of the leg 14 between its pivotal connection to the collar 13 and the pivotal connection to the link 15 equal to the length of the link 15.

This provides a balancing of the forces involved so that the legs 14 will remain in whatever position they may be placed without the provision of any locking means.

Within the tube 10 there is provided a slidable tube 11 of appropriate length for supporting the upper edge of the projection screen 26. This tube 11 is square like the tube 10 and is of such dimensions as to be a freely sliding fit within the tube 10.

Adjacent the top of the tube 10 there is provided a latch 18 for securing the tube 11 in adjusted position in relation to the tube 10. This latch 18 is provided with a spring 19 forcing the end 21 through into the holes 22 and 23. The latch itself is pivoted into the outer tube 10 at 20 as shown in Fig. 4. Holes are provided as indicated at 23 at appropriate places in the inner tube 11 so that this tube may be latched in whatever position may be desired. It should be noted that the end portion 21 of the latch member 18 fits into the holes in the tubes 10 and 11 so that this portion of the latch is stressed almost entirely in shear. In addition, the weight of the tube 11 is carried on the portion 21 of the latch member 18 almost in alignment with the pivot 20 of the latch 18 so that even if the member 21 is a relatively loose fit in the hole 22, the forces imposed on the latch will still only be those of shear and tension and the spring 19 is thereby relieved of any direct supporting function in relation to the tube 11.

The top of the tube 11 carries the goose neck 16 which is formed from sheet metal as shown in Figs. 2 and 3 as distinguished from the cast and machined goose necks heretofore used. The extending arm 16 is, as shown in Fig. 2, composed of two layers of material bent into position and which may be secured together by soldering, spot welding or riveting, although the rigidity of the material may be depended upon without the use of any of these methods of securing. The loop in the metal between the two portions of the arm 15 is formed into a square box 17 which is a snug fit on the top of the tube 11 and may be further secured thereto by riveting, sweating or the like. As shown in Figs. 1, 2 and 3, one portion of the sheet metal forming the goose neck 16 is bent over the top of the tube 11 to assist in supporting the load on the top of

the tube and to prevent the accumulation of dirt within the tube.

The screen 26 is carried within a cylindrical housing 24 which is adapted to be rotated on the pivot 25 into a position parallel to the tube 10 for carrying into a transverse position as illustrated in solid lines for the showing of pictures. When in the solid line position the link or hook 35 is hooked over the notch in the goose neck 16 thereby holding the screen in a vertical position and maintaining the screen roller, together with the case 24 in a transverse position. The case 24 together with the screen may be moved longitudinally along the tube 10 by the member 27 provided with the handle 28. The member 27 is bent up of flat material and is provided with rectangular holes which are an easy sliding fit on the exterior of the tube 10. The handle 28 may be formed by bending the rear portion of the member 27 to appropriate form. The member 27 together with the screen case 24 is secured in appropriate position upon the tube 10 by the thumb latch 29 which is pivoted at 31 and pressed by the spring 30 to urge the pin 32 into an appropriate aperture in the tube 10. An angle member 34 is provided which is connected to the member 27 and extends upwardly along the tube 10 and has an aperture therein fitting around the pin 32. Due to the support of pin 32 by the

angle member 34, there is practically no strain thrown on the latch 29 and the spring 30 and the entire weight of the case 24 and the screen when enclosed therein is carried by the shear on the pin 32. When it is desired to support the screen at a different height, the latch 29 is pressed and the entire screen and holder are moved along the tube 10 to some other appropriate aperture such, for example as that indicated at 33.

It will be seen from the foregoing that I have provided a screen stand which is unusually rigid and proof against wear and which is extremely simple to operate.

Having now described my invention, I claim:

15 A self-aligning supporting stand for motion picture screens including a square tubular body member having holes in a side thereof, a tripod base therefor, a screen container movably and revolvably supported on said tubular body, a square tubular self-aligning extension member complementary to and slidable within said body member, and latches including spring-pressed members passing through said tubular body member and engaging said holes and positively fixing said screen container and said tubular extension member in position relative to said tubular body member.

JAMES H. OWENS.